Tanzania

The following provides a summary of specific guidelines from the country's national TB guidance strategy. Use the jump links in yellow to access details on case definitions, diagnostic methods, standard protocols, and DOTS recommendations. This summary can be downloaded or e-mailed to yourself or a colleague. The original country guidance document can also be found below the jump links for download.

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Adults

Year Issued:

2006

TB Screening Frequency for PLHIV:

NTLP will promote screening for TB among PLHA in collaboration with NACP as part of intensified case finding. The screening will be done using as a minimum, a set of questions based on symptoms and signs to identify TB suspects. The questions will be asked by trained counselors at services provision sites. Screening will be followed by early diagnosis and prompt treatment. This aims at improving chances of survival, quality of life and reducing transmission of TB in the community.

Screening Recommendations during TB Treatment:

Routine sputum smear examination of an early-morning sputum at the end of the intensive phase is required. The majority of patients will have converted to negative sputum. If the sputum is still positive at the end of the intensive phase, the intensive phase treatment (RHZE) should be continued for another month. The sputum is checked again at the end of the third month but regardless of the result, the patient should continue with the continuation regimen (RH). If the result is positive after three months, a sputum sample should be sent to TB Reference Laboratory for culture and susceptibility testing.

Patients on Category II retreatment, failing to convert after three months intensive phase should continue one more month with RHZE and have their sputum checked at the end of the fourth month. If the sputum smear is still positive after 4 months, at least one sputum sample should be sent for culture and susceptibility testing. The patient should continue on the Category II continuation phase treatment RHE.

All smear positive patients should have another early morning sputum sample checked at 5 and 7/8 (retreatment) months. A negative smear at 5 and 7/8 months means that the patient is bacteriologically cured. A positive result means treatment failure.

All sputum results (0, 2,3, 5 and 7/8 months) should be registered with date and laboratory number in the District Tuberculosis Register.

Case definition:

Smear positive pulmonary tuberculosis (PTB+) Tuberculosis in a patient with at least two initial smear examinations positive by direct microscopy for Acid Fast Bacilli (AFB+),

OR

Tuberculosis in a patient with one initial smear examination positive by direct microscopy AND positive by culture for mycobacteria.

OR

Tuberculosis in a patient with one initial smear examination positive by direct microscopy for Acid Fast Bacilli (AFB+) AND X Ray abnormalities suggestive of active tuberculosis as determined by the treating Medical Doctor.

Smear negative pulmonary tuberculosis (PTB-) Tuberculosis in a patient with three initial negative smear examinations by direct microscopy for Acid Fast Bacilli (AFB-) AND non-response to a course of broad-spectrum antibiotics, AND again three negative smear examinations by direct microscopy, AND X-ray abnormalities suggestive of active tuberculosis as determined by the treating Medical Doctor.

OR

Tuberculosis in a patient with three initial smear examination negative by direct microscopy but positive by culture for mycobacteria.

Diagnostic methods:

The diagnosis of tuberculosis rests mainly on the identification of the tubercle bacilli by sputum smear microscopy.
Every tuberculosis suspect should submit three sputum specimens for smear microscopy

In Tanzania sputum culture for isolation of mycobacterium is performed on Lowestein Jensen medium (a solid egg enriched) and normally for:

- Surveillance of tuberculosis drug resistance as an integral part of evaluation of NTLP performance.
- Follow-up of tuberculosis patients who fail to cure, relapse or become chronic excretors after a standardized course of treatment and who may be at risk of harbouring drug resistant organisms.
  Other microbiological techniques that could be used include;
    - cultivation in liquid media,
    - serological techniques
    - BacTec
    - molecular techniques – PCR, DNA probes

Standard TB Treatment Protocols:

Category I: New sputum smear positive PTB New seriously ill patients with severe forms of tuberculosis:
2 RHZE/4 RH

Category II: Relapse, Treatment failure and sputum smear positive return:
2 SRHZE/1 RHZE/5 RH3E3

Category III: New sputum smear negative and extrapulmonary TB (less severe forms):
2 RHZE/4 RH

Category IV: Chronic patients
These are patients who remain or become sputum smear positive after completing a fully supervised re-treatment regimen. It is important to identify patients with Multidrug Resistant (MDR) TB among chronic patients. Not every chronic patient is an MDR-TB case. Many of these patients, although persistently smear positive, may still be partially or fully sensitive to the first line anti-TB drugs. This situation may occur due to poor adherence to therapy (patients who collect their drugs but don't take them "hidden defaulters") or chronic diseases such as chronic malabsorption which is quite common in HIV positive patients."

DOTS Recommendations:

Direct observation of treatment means that a supervisor watches the patient swallow the tablets. This ensures that a TB patient takes the right drugs, in the right doses, at the right intervals. In principle, DOT is always required when rifampicin is given, since rifampicin is the strongest and most valuable of currently used anti-TB drugs and one cannot afford to risk the development of rifampicin resistance because of poor compliance to medication. This implies that DOT is provided throughout 6 months treatment for new cases and 8 months for re-treatment regimen. To ensure adherence to treatment, DOT should be provided as convenient as possible to the patient (close to the patients' home or workplace). The type of DOT is recorded in the TB register and patients identity card.

DOT services are provided through:

1. 1. Health facility
2. Community/home based DOT

The arrangements for DOT must be fully integrated in the management of health services at each health facility. Health facilities providing DOT should be supervised at least once per month by the DTLC. NTLP is recommending Patient Centred TB Treatment (PCT) approach as part of community based DOT activities. Patient Centred TB Treatment (PCT) means that TB patients are given an opportunity to choose where their daily treatment is supervised and by whom. This means that, patients can choose to come to the health facility for their daily DOT or they can take their treatment at home with a treatment supporter of their own choice (home-based DOT).

Children

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smear examinations by direct microscopy, AND X-ray abnormalities suggestive of active tuberculosis as determined by the treating Medical Doctor. OR Tuberculosis in a patient with three initial smear examination negative by direct microscopy but positive by culture for mycobacteria.

Diagnostic methods:

The tuberculin skin test is valuable as a diagnostic tool in young children. In a child who did not receive a BCG, an induration of 10 mm or more is interpreted as positive. If the child did receive a BCG, the induration should be at least 15 mm to be positive. A positive tuberculin skin test should only be one clue to be interpreted in combination with other findings to favor the diagnosis of TB (see diagnosis of TB in children).

The diagnosis of TB in children can be very difficult owing to the wide range of symptoms. Sputum cannot often be obtained from children and in any case it is often negative even on culture. Symptoms in children are not typical. The diagnosis should therefore be based on clinical findings (especially failure to thrive or weight loss), family history of contact with a smear positive case, X-ray examination and tuberculin testing, culture (if available) and nonresponse to broad spectrum antibiotic treatment. A score chart below can help to reach the diagnosis of tuberculosis. Older children who are able to cough up sputum should go through the same assessment as adults using smear microscopy as the "gold standard".

Standard TB Treatment Protocols:

In principle TB treatment in children does not differ from that in adults. Nearly all pulmonary TB in children is sputum smear negative (actually smear "not done") or extra-pulmonary tuberculosis and thus fall into category III. However, severe forms of TB such as meningitis, miliary TB or TB of the spine should be defined as category I. Treatment can be provided with adult formulation following the dose-body weight relationship Children who develop tuberculosis following BCG vaccination, which is sometimes seen in HIV positive children (see BCG), should be treated with 2{RH}E/4RH, as M.bovis is usually resistant to Pyrazinamide.

DOTS Recommendations:

During continuation phase parents/guardians can supervise DOT to their children and keep record of the medication. Parents/guardians should collect the drugs once per week from a health facility.
